AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of claims

Please amend the claims as follows:

1. (Currently Amended) An alcohol sensor utilizing a work function measurement principle comprising at least one gas-sensitive field-effect transistor which comprises at least one substrate having source and drain areas and at least one gate electrode located at a distance ~~parallel to a gate region between~~ from the source and drain areas ~~thereby forming a physical separation between said substrate and said gate electrode, said gate electrode being associated with~~ such that a vacant space between the gate electrode on the one hand and the source and drain areas on the other hand is formed,

wherein a gas-sensitive layer comprising a polymer or an inorganic metal oxide ~~and wherein the layer may alternatively be applied separately to the substrate such that it is substantially opposite a gate region of the field-effect transistor~~ is applied to the gate electrode such that a vacant space between the gas-sensitive layer on the one hand and the source and drain areas on the other hand is formed.

2. (Previously presented) The alcohol sensor according to claim 1, wherein the gas-sensitive layer comprises a polymer and is selected from the group consisting of polysiloxane or and a polysilsesquioxane derivative.

3. (Cancelled)

4. (Original) The alcohol sensor according to claim 1, wherein the metal oxide is scandium oxide (Sc2O3).

5. (Original) The alcohol sensor according to claim 1, further comprising an electrical heater.

6. (Original) The alcohol sensor according to claim 1, having an operating temperature in the range of between about room temperature and above 60°C.

7. (Original) The alcohol sensor according to claim 1, further comprising a plurality of different gas-sensitive layers.

8. (Original) The alcohol sensor according to claim 7, wherein a gas-sensitive layer is alcohol-sensitive and moisture-sensitive.

9. (Original) The alcohol sensor according to claim 8, wherein the moisture effects of the alcohol-sensitive layer are compensated for by means of the essentially moisture-sensitive layer.

10. (Original) The alcohol sensor according to claim 1, further comprising a gas-insensitive transistor for compensating for temperature effects.

11. (Previously Presented) An alcohol sensor utilizing a work function measurement principle comprising at least one gas-sensitive field-effect transistor which comprises at least one substrate having source and drain areas and at least one gate electrode located at a distance from a gate region between the source and drain areas, said gate electrode being associated with a gas-sensitive layer comprising a polymer or an inorganic metal oxide and wherein the layer is applied separately to the substrate such that it is substantially opposite a gate region of the field-effect transistor thereby forming a gap there between, wherein the gas-sensitive layer comprises a polymer and is selected

from the group consisting of polysiloxane or and a polysilsesquioxane derivative, wherein the polysilsesquioxane derivative is polycyclopentylsilsesquioxane.

12. (Currently amended) An alcohol sensor utilizing a work function measurement principle comprising:

at least one gas-sensitive field-effect transistor which comprises at least one substrate having source and drain areas, ~~and~~ at least one gate electrode located at a distance ~~parallel to a gate region between~~ from the source and drain areas, ~~thereby forming a physical separation between said substrate and said gate electrode;~~

~~wherein~~ and a gas-sensitive layer, ~~selected from the group consisting of a polysiloxane, a polycyclopentylsilsesquioxane, and an inorganic metal oxide; is applied as a coating to said substrate or said gate electrode~~

wherein the gas-sensitive layer comprises polycyclopentylsilsesquioxane.

13. (New) The alcohol sensor according to claim 2, wherein the polysilsesquioxane derivative is polycyclopentylsilsesquioxane.